

HYDRAULIC ENGINEERING FIELD REPORT

I. HYDRAULIC AND HYDROLOGICAL DATA REQUIRED FOR ALL EXISTING OR PROPOSED BRIDGE STREAM CROSSING PROJECTS

A. Project Location

Project No.: _____ County: _____ District: _____
 P.I. No.: _____ Stream Name: _____ Route: _____
 Surveyed By: _____ Date: _____

B. Site Information

Floodplain and Stream Channel description:

1. Flat, rolling, mountainous, etc.: _____
2. Wooded, heavily vegetated, pasture, swampy, etc.: _____
3. Stream channel description: well-defined banks, meandering, debris, etc.

4. Is there any fill in the upstream or downstream floodplain, which will affect the natural drainage or limit the floodplain width at this site?

C. Required Existing Bridge Information at Project Site

1. Bridge Identification No.: _____
2. Date Built: _____
3. Skew angle of bridge bents: _____
4. Height of curb, parapet or barrier: _____

Substructure Information:

1. Column type (concrete, steel, etc.): _____
2. Size of columns: _____
3. Number of columns per bent: _____
4. Guide Bank (Spur Dike) length, elevation and location (if applicable):

5. Note any scour problems at intermediate bents or abutments:

Note: The above information is required for all bridges within the floodplain (main and overflow bridges) along the roadway. In addition, the location, size and number of barrels are required for all box culverts located within the floodplain.

D. Normal Water Surface Data

	<u>WS ELEV</u>
500 feet upstream of survey centerline:	_____
At the survey centerline:	_____
500 feet downstream of survey centerline:	_____
Normal high tide:	_____
Normal low tide:	_____

E. Historical Flood Data

1. Extreme high water elevation at site: _____ Date: _____
2. Highest observed tide elevation: _____ Date: _____
3. Location of extreme high water elevation (upstream/downstream face of bridge at the centerline or station and offset if not at bridge):

4. Source of high water information: _____

5. Location and floor elevation of any houses/buildings/structures that have been flooded:

6. Information about flood (number of times structure has been flooded, water surface elevations and date(s) of flood):

7. Location and floor elevation of any houses/buildings/structures that have floor elevations within 2 feet of the extreme high water elevation:

F. Benchmark Information

Location 1:

1. Benchmark Name: _____ Elevation: _____
2. Location (*project stations/offset*): _____
 Northing: _____ Easting: _____
3. Physical description: _____

Location 2:

1. Benchmark Name: _____ Elevation: _____
2. Location (*project stations/offset*): _____
 Northing: _____ Easting: _____

3. Physical description: _____

Location 3:

1. Benchmark Name: _____ Elevation: _____

2. Location (*project stations/offset*): _____

Northing: _____ Easting: _____

3. Physical description: _____

G. Upstream and Downstream Structures

Structure 1

1. Structure Type (railroad/highway bridge, culvert): _____

2. Route Number (if applicable): _____

3. Distance from proposed structure along stream centerline: _____

4. Length of bridge or culvert size: _____

5. Superstructure (slab thickness, beam depth): _____

6. Substructure information: _____

7. Column Type (concrete, steel, etc.): _____

8. Size of Column: _____

9. Number of Columns per bent: _____

Structure 2

1. Structure Type (railroad/highway bridge, culvert): _____

2. Route Number (if applicable): _____

3. Distance from proposed structure along stream centerline: _____

4. Length of bridge or culvert size: _____

5. Superstructure (slab thickness, beam depth): _____

6. Substructure information: _____

7. Column Type (concrete, steel, etc.): _____

8. Size of Column: _____

9. Number of Columns per bent: _____

Structure 3

1. Structure Type (railroad/highway bridge, culvert): _____

2. Route Number (if applicable): _____

3. Distance from proposed structure along stream centerline: _____

4. Length of bridge or culvert size: _____

5. Superstructure (slab thickness, beam depth): _____

6. Substructure information: _____

7. Column Type (concrete, steel, etc.): _____

8. Size of Column: _____

9. Number of Columns per bent: _____

NOTE: The above information is required for all bridges or culverts, which lie within 2000 feet upstream and downstream from the project bridge, unless otherwise directed by the Office of Bridge Hydraulics.

H. Miscellaneous Information

1. Are there water surfaces affected by other factors (high water from other streams, reservoirs, etc.):

2. Give location (horizontal distance to dam or spill way along stream centerline), length, width and elevation of dam and spillway, if applicable:
